

Tsuguo HONGO*: Notes on Japanese larger fungi (18)**

本郷次雄*: 日本産きのこ類の研究 (18)**

The present paper deals with seven species of Agaricales which were collected in various parts of Honshû during these about ten years. Six of them are new to science, distributed in *Amanita*, *Coprinus*, *Hebeloma*, *Xerocomus* and *Lactarius*, and one hitherto poorly known has been critically studied. The collection numbers are the writer's unless otherwise stated. All the collections are deposited in his herbarium.

116) *Amanita melleiceps* Hongo sp. nov.

Pileo 3-6 cm lato, e subglobose convexo, dein expanso, demum subdepresso, subviscido, e melleo subochraceo, margine pallidiore tuberculato-striatoque, glabro, fragmentis volvae albidæ vel pallide flavidæ farinosæ consperso; carne albidæ vel pallide flavidæ, tenui, odore saporeque nullo; lamellis liberis, albis, subdistantibus vel subconfertis ($L=69-87$; $l=0-1$), ventricosis, ± 4 mm latis, fimbriatis, lamellulis truncatis; stipite 3-5 cm longo, 4-7 mm crasso, exannulato, sursum attenuato, deorsum obovate bulboso, pruinoso, albo vel sursum cremeo, cavo; volva pulvera, albidæ, evanidæ; sporis hyalinis, late ellipsoideis, $8.5-12.5 \times 6-8.5 \mu$, laevibus, nonamyloideis; basidiis tetrasporis, $27-40 \times 9-10.5 \mu$; cellulis aciei lamellarum globosis, ellipticis, piriformibus vel clavatis ($12.5-16.5 \mu$ diam. vel $15-24 \times 10.5-13.5 \mu$), hyalinis, tenui-tunicatis.

Hab. Scattered or gregarious on the ground in forests of *Pinus densiflora* (mixed with *Quercus serrata*, etc.), Senjô, Ôtsu-city, Sept. 9, 1960 (no. 2100); June 22, 1965 (no. 3070-type); July 9, 1965 (no. 3085); July 12, 1965 (no. 3092); in forest of *Pinus thunbergii*, Matsunami-chô, Niigata-city, July 10, 1954 (Matsuda, no. 44).

Distr. Endemic (Shiga, Niigata, Saitama, Tochigi).

Not uncommon, from summer to autumn (June-Oct.). This species is apparently closely related to *A. farinosa* Schw. but is readily distinguished by the melleous color of the cap and the larger spores. It also superficially resembles *A. pulchella* Imai (sensu Hongo) from which it differs in the absence of a ring.

117) *Amanita rufoferruginea* Hongo sp. nov.

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Pileo 4.5-6 cm lato, globoso dein convexo-plano, demum subdepresso, in margine leviter striato, sicco, fulvo, fragmentis volvae rufo-ferrugineae pulverulentae dense oblecto; carne tenui, alba, sapore odoreque nullo; lamellis postice

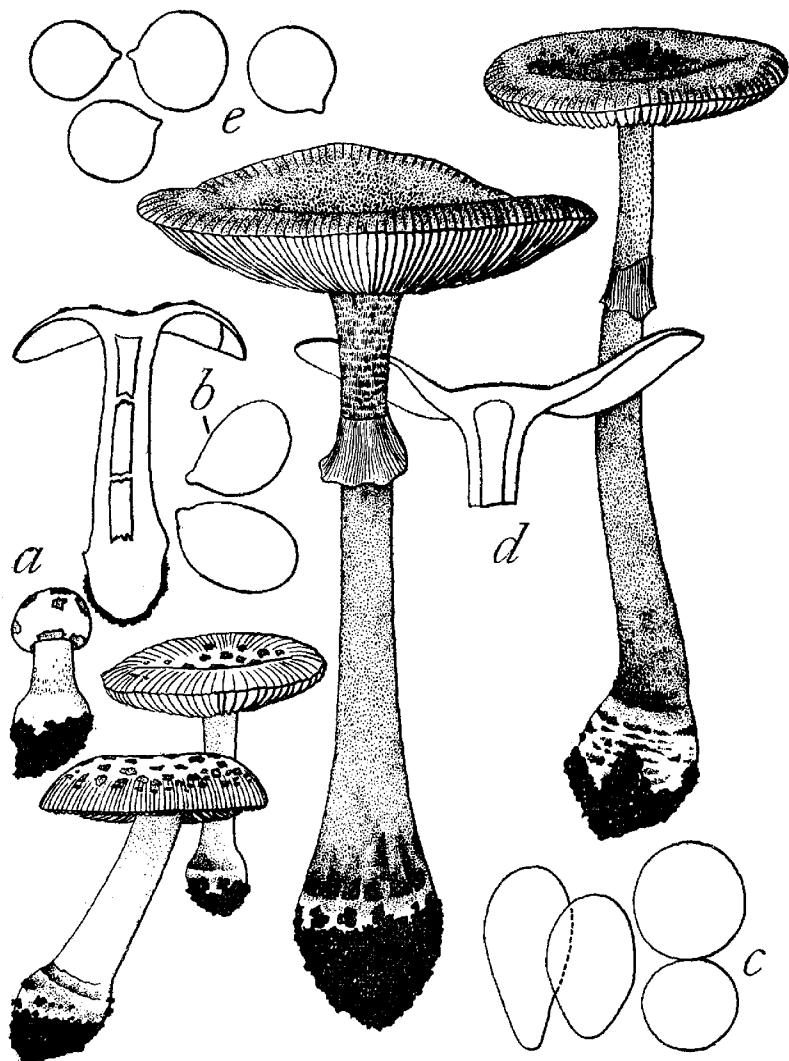


Fig. 1. *Amanita melleiceps* Hongo: a. Carpophores. b. Spores. c. Marginal cells. *Amanita rufoferruginea* Hongo: d. Carpophores. e. Spores. (a, d. $\times 1$; b, e. $\times 1500$; c. $\times 900$).

attenuato-liberis (lamellis truncatis), ventricosus, ± 4 mm latis, confertis, albis, acie rufo-pruinosa; stipite 9–10 cm longo, 4–5 mm crasso, sursum attenuato, basi obovate bulboso (1.3–1.5 cm), dense pulverulento, apice pulvero-squamuloso, pileo concolori, e farcto cavo; annulo supero vel subdistante, membranaceo, striatulo, albo, demum evanido; volva pulvera, evanida; sporis hyalinis, sphaeroideis, 7–8 μ diam., laevibus, nonamyloideis; basidiis tetrasporis; cellulis aciei lamellarum globosis, piriformibus vel clavatis, tenui-tunicatis.

Hab. Solitary on the ground in pine forest, Iwakura, Kyoto-city, July 29, 1965, N. Sagara (no. 3122-type); Aug. 1, 1965 (no. 3124).

Distr. Endemic (Kyoto, Hiroshima).

An uncommon, summer fungus. This is one of the most distinctive species of our Amanitas, and is readily recognizable by the light brown (leather brown or Terra Cotta) pulverulent cap and stem and the white membranaceous striatulate ring.

118) **Coprinus aokii** Hongo sp. nov.

Pileo 0.4–1.2 cm alto, e ovali-subcylindrico campanulato, deinde usque ad 3 cm expanso, sub lente minute pulverulento, radiato-sulcato, pallide fulvo-argillaceo, centro obscuriori, demum livido-griseo; carne subconcolore, tenuissima, fragili, odore saporeque nullo; lamellis subliberis, angustis (1–1.5 mm), confertis (demum distantibus), candidis, dein nigris, deliquescentibus, acie pruinata; stipite 4–10 cm longo, 1.5–2 mm crasso, aequali vel inferne subincrassato, cavo, candido, minute pruinoso; sporis in cumulo atris, sub microscopio atro-brunneis, ellipsoideis, laevibus, poro excentrico, 10–13.5 \times 6–7.5 μ ; basidiis tetrasporis, 20–28 (38) \times 10–11.5 μ ; cheilocystidiis numerosis, vesiculosis, hyalinis, tenui-tunicatis, 30–64 \times 20–39 μ ; pleurocystidiis sparsis vel nullis; dermatocystidiis cylindratis, inferne incrassatis, obtusis, tenui-(interdum crasse-) tunicatis, 85–117 \times 11.5–15 μ ; hyphis omnibus fibulatis.

Hab. Cespitose or gregarious on fallen branches, dead grass stems, etc., Nishinoshō, Ōtsu-city, June 9, 1958 (no. 1776); Senjō, Ōtsu-city, June 7, 1963 (no. 2713-type); Ishizue, Ōtsu-city, May 29, 1965 (no. 3057).

Distr. Endemic (Shiga, Saitama).

Common, from late spring to autumn. Mr. M. Aoki also collected this fungus in Tokorozawa, Saitama-pref. It should be placed in sect. Hemerobii, subsect. Setulosi of Singer's system (The Agaricales in modern taxonomy, 500–502. 1962).

119) **Psathyrella multissima** (Imai) Hongo, Journ. Jap. Bot. 27: 193. 1952

—*Psathyra multissima* Imai, Journ. Facul. Agr. Hokk. Imp. Univ. **43**: 293. 1938.

Spores dark gray-brownish under the microscope (in KOH), ellipsoid, smooth, with a hyaline apical germ pore, $7.5-8.5 \times 4-4.5 \mu$; basidia four-spored; cheilo-

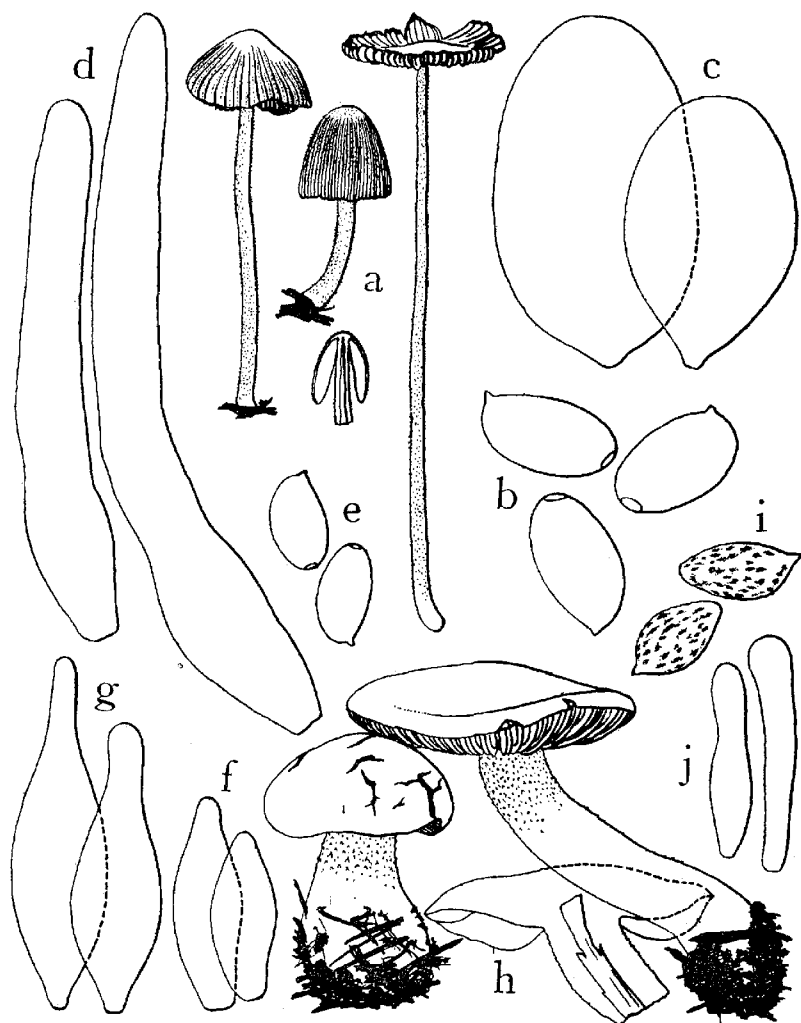


Fig. 2. *Coprinus aoki* Hongo: a. Carpophores. b. Spores. c. Cheilocystidia. d. Pileocystidia. *Psathyrella multissima* (Imai) Hongo: e. Spores. f. Cheilocystidia. g. Pleurocystidia. *Hebeloma crustuliniforme* (St. Amans) Quéf. f. *microsporum* Hongo: h. Carpophores. i. Spores. i. Cheilocystidia. (a, h. $\times 1$; b, e, i. $\times 1500$; c, d, f, g, j. $\times 900$).

cystidia abundant, fusoid-ventricose, hyaline, thin-walled, $25-35 \times 7-10.5 \mu$; pleurocystidia scattered, fusoid-ventricose, usually with a neck, hyaline, $37-47 \times 11.5-15.5 \mu$.

Hab. Densely cespitose on decayed wood of *Fagus crenata*, at about 1,400 m elevation of Mt. Zaô, Yamagata-pref., Oct. 2, 1965 (no. 3155).

Distr. Endemic (Hokkaido, Yamagata).

Ill. Imai, l.c. pl. 5, f. 2; Ito, Mycol. Fl. Jap. 2(5): 310, f. 136. 1959.

The writer's material corresponds exactly to Imai's original description in all respects. Differs from both *P. microsperma* (Pk.) Smith and *P. multipedata* (Pk.) Smith (= *Psathyra stipatissima* Lange) in the somewhat larger spores. But the rugulose margin of the cap of *P. multissima* shows a close resemblance to the latter. The writers's collection forms the first record of its occurrence in Honshû.

120) **Hebeloma crustuliniforme** (St. Amans) Quél. forma **microspermum** Hongo f. nov.

A typo differt sporis minoribus, $7.5-9 \times 4.5-5 \mu$.

Pileus 2.5-5.5 cm broad, convex with inrolled margin at first, then expanding to broadly convex or nearly plane, surface glabrous, at first viscid, pale tan, often tinged brownish-alutaceous, especially on the disc, sometimes irregularly cracked. Flesh thick, whitish, odor of radish, taste mild. Lamellae sinuate, close to crowded, 3-6 mm broad, whitish then clay color, edges somewhat eroded. Stipe 3-6 cm long, 7-18 mm thick, equal or thickened at the base, whitish, often becoming sordid alutaceous below, more or less fibrillose, covered with minute flocculose granules from above downward, solid or hollow. Spores pale fulvous under the microscope, subamygdaliform, very minutely punctate or nearly smooth, $7.5-9 \times 4.5-5 \mu$ (or $8.5-10.5 \times 4.5-5.5 \mu$); basidia four-spored, $21-30 \times 6.5-8 \mu$; cheilocystidia abundant, subclavate to subcylindric, hyaline, thin-walled, $20-39 \times 4-6.5 \mu$; pleurocystidia none; clamp connections present.

Hab. Solitary or gregarious on the ground in pine forests, Akiba-yama, Niitsu-city, Oct. 24, 1961 (no. 2385-type); Terabe, Ôtsu-city, Apr. 14, 1964 (no. 2848) and Nov. 10, 1965 (no. 3190).

Distr. Endemic (Niigata, Shiga).

Rather common from spring to autumn. Distinguished from the typical form by the somewhat smaller spores. For *H. crustuliniforme*, the following measurements of spores have been given:

Rea (1922)

$10-12 \times 5-6 \mu$.

Lange (1938)	$11\frac{1}{2}-12 \times 6\frac{1}{2} \mu$.
Imai (1938)	$10-13.5 \times 6-7.5 \mu$.
Wakefield and Dennis (1950)	$10-12 \times 6-7 \mu$.
Moser (1955)	$10-12 \times 5.5-6.5 \mu$.

121) **Xerocomus nigromaculatus** Hongo sp. nov.

Pileo 1.7-7 cm lato, convexo dein plano, sicco, tomentoso-granuloso vel rimuloso-areolato, pallide argillaceo, demum nigro-maculato, margine primum incurvato; carne crassa, pallide flavida, fracta pilei caerulescente demum rubescente, stipite rubescente, inodora, miti; tubulis adnato-subdecurrentibus, 5-12 mm longis, citrinis vel flavis, fractis caerulescentibus; poris angulatis, amplis, 0.7-2 mm latis, citrinis vel flavis; stipite 2-5 cm longo, 4-10 mm crasso, subaequali vel basi leniter incrassato, pileo concolore, fibrilloso-striato vel sublaevi, solido, mycelio albo; sporis pallide olivaceo-melleis, fusoido-ellipsoideis, laevibus, $7.5-10.5 \times 3.5-4 \mu$ (vel $9.5-12.5 \times 3.5 \mu$); basidiis tetrasporis, $27-30 \times 8.5-9.5 \mu$; cystidiis numerosis, subcylindraceis vel ventricoso-fusiformibus, hyalinis, tenui-tunicatis, $37-75 \times 9-15 \mu$; hyphis fibulis carentibus.

Hab. Scattered or gregarious on the ground in pine forests (mixed with *Quercus*, etc.), Hiratsu, Ōtsu-city, July 13, 1960 (no. 2077); Senjō, Ōtsu-city, Sept. 14, 1960 (no. 2105); July 17, 1964 (no. 2893-type); Terabe, Ōtsu-city, July 1, 1961 (no. 2272); Sept. 27, 1965 (no. 3148).

Distr. Endemic (Shiga).

Easily recognized by the blackish staining of cap and stem and by the flesh which becomes first bluish then reddish. Probably not uncommon.

122) **Lactarius circellatus** Fr. forma **distantifolius** Hongo f. nov.

A typo differt lamellis distantibus.

Pileus 3-7 cm or more broad, convex then plane, somewhat depressed in the center, often irregular and repand when older, surface very viscid in wet weather, "fuscous" to "hair brown" (Ridgway) at the center, somewhat paler toward the margin, with darker zones; margin at first involute. Flesh thick, compact, whitish, subconcolorous under the pellicle; odor slight, agreeable. Milk white, not changing color, acrid. Lamellae adnate, sometimes with a decurrent tooth, distant (or subdistant), sometimes forked, 3-6 mm broad, whitish then becoming cremesous ("pale ochraceous-salmon" to "capucine buff"), edges entire. Stipe 2-5 cm long, 6-13 mm thick, equal or tapering into a somewhat rooting base, paler than the pileus, often strigose at the base, spongy-stuffed. Spores pale cream in mass,

subspheric oval, $6.5-7 \times 5.5-6 \mu$, surface concentrically arcuate cristate, amyoid; basidia four-spored, $35-41 \times 7.5-9.5 \mu$; cheilo- and pleurocystidia numerous, $64-86(93) \times 9.5-11.5 \mu$, fusiform-lanceolata, with obtuse apices.

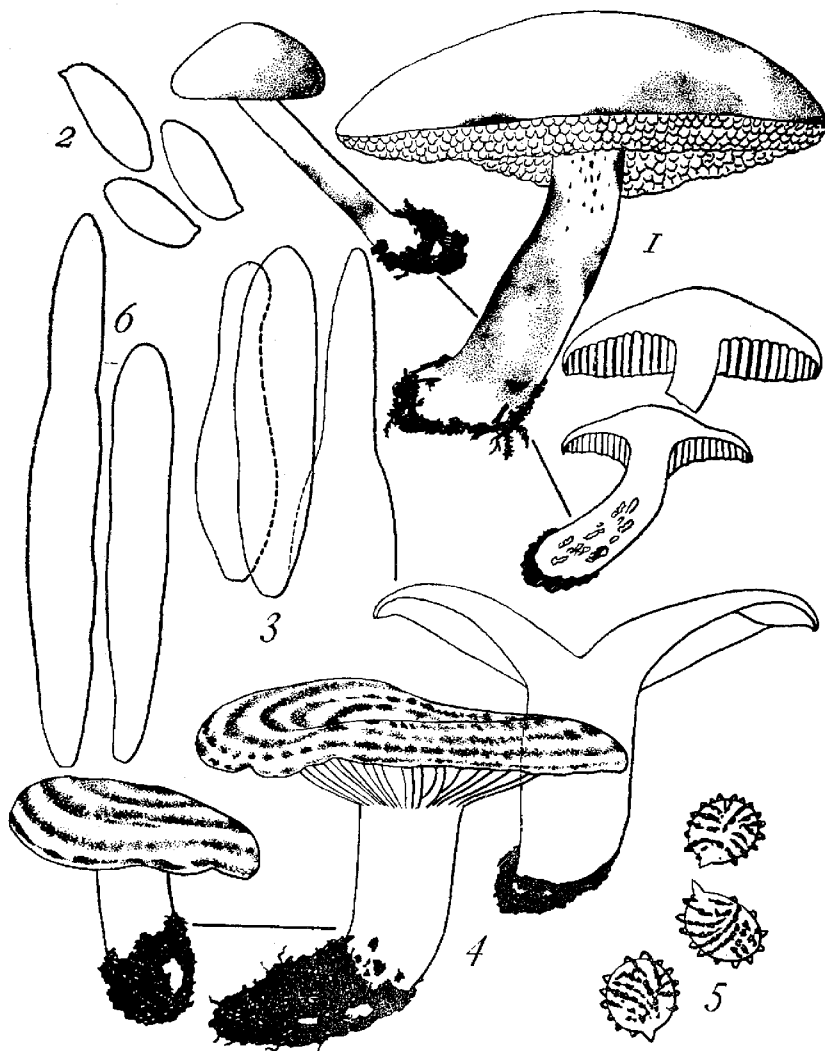


Fig. 3. *Xerocomus nigromaculatus* Hongo: 1. Carpophores. 2. Spores. 3. Cystidia. *Lactarius circellatus* Fr. f. *distantifolius* Hongo: 4. Carpophores. 5. Spores. 6. Pleurocystidia. (1, 4. $\times 1$; 2, 5. $\times 1500$; 3, 6. $\times 900$).

Hab. Gregarious on the ground under *Carpinus*, Bot. Gard. of Kyoto Univ., Kitashirakawa, Kyoto-city, May 25, 1956 (no. 1439-type); May 21, 1963 (no. 2686); June 1, 1965 (no. 3061).

Distr. Endemic (Kyoto).

Fairly common in deciduous forests, especially under *Carpinus*. Differs from the type form in the distant gills.

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この報文には日本産のハラタケ目(マツタケ目)菌類 7 種を取り扱った。

116) ヒメコガネツルタケ (富士堯氏新称, 新種)。かさの径 3—6 cm, 茎の高さ 3—5 cm の比較的の小形の種類で, ヒメコナカブリツルタケ *Amanita farinosa* Schw. にもっとも近縁と考えられるが, かさの色が灰色でなく帯褐黄色~帯黄土色であること, 外被膜が帯白色~帯淡黄色で, かさ面に残る場合も粉末状に散らばることなく, いぼ状の破片となることなどで区別される。また, ココガネ テングタケ *A. pulchella* Imai (sensu Hongo) とはつばを欠く点で容易に区別できる。大津市石山千町のマツ林で採集。その他新潟県・埼玉県・栃木県などでも採集されている。

117) カバイロコナテングタケ (新種)。かさと茎がかば色の粉末 (外被膜) に密におおわれることと, つばが白色膜質であることで非常に印象的なキノコである。京都市岩倉のアカマツ林で相良直彦氏ならびに筆者がそれぞれ採集した。なお筆者は 1943, 4 年ごろ広島市宇品港の近くの金輪島でも採集したことがあるが, 現在その標本は残っていない。

118) ビロードヒトヨタケ (新種)。やや小形の種類で, かさおよび茎の表面に微毛 (dermatocystidia) が密生し, レンズ下ではビロード状をなす。胞子の発芽孔はかなりはずれに着いている。大津市西ノ庄, 同市石山千町, 同市田上石居町などで採る。さらに青木実氏は所沢市で数回採集している。

119) センボンクスダケ (今井)。林内の朽木上におびただしく多数がかたまっている繊弱な種類で, 1938 年今井三子博士により, 北海道野幌から記載されたものである。山形県蔵王山の海拔 1,400 m 付近, ブナの朽株上で採った。本州新産。

120) コツブオオワカフサタケ (新品種)。オオワカフサタケ *Hebeloma crustuliniforme* (St. Amans) Quél. の胞子の小形のもの。新津市秋葉山および大津市石山寺辺町のアカマツ林内で採集した。

121) クロアザアワタケ (新種)。かさや茎が手でふれるとしだいに黄っぽくなると, 肉を切断したときただちに青変し, のち赤く変わることとで容易に見分けられる。ただし茎の肉は通常直接赤変し, また個体によってはかさの部分でも青くならず赤変することもある。大津市, 滋賀大学付近のマツ林内で採集。

122) ヒロハシデチチタケ (新品種)。外観的にも顕微鏡的にも欧州産の *Lactarius circellatus* Fr. とほとんど同様であるが, ただひだが生ずる点で区別される。アカシデ・イヌシデ・クマシデなどシデ属の樹下に発生するもので, おそらくシデ類に菌根を作るものと思われる。京都大学植物園内で採集。また京都大学芦生演習林にも発生する。